IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

ESCORT INC.,   §
                                      §
      Plaintiff,   §
                                      §
                                      §
v.   §   Civil Action No. 3:18-CV-0161-N
                                      §
UNIDEN AMERICAN CORP.,   §
                                      §
      Defendant.   §

ORDER

This Order addresses the construction of several disputed claim terms pursuant to

Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995) (en banc), *aff'd*, 517

U.S. 370 (1996). Plaintiff Escort Inc. ("Escort") contends that Defendant Uniden America

Corp. ("Uniden") infringed United States Patent Nos. RE38,038 ('038 Patent), RE40,653

('653 Patent), and 7,576,679 ('679 Patent). Having reviewed the relevant intrinsic evidence

in the record, and such extrinsic evidence as necessary, the Court construes the disputed

terms and phrases as provided below.

I. BACKGROUND OF THE INVENTIONS

The patents in suit all relate to the operation of radar detectors used by drivers to

detect police radar used to enforce speed limits. False positives, i.e., an alert generated by

a radar detector in the absence of working police radar, are a problem for radar detectors.

The patents in suit are directed to using global positioning system ("GPS") data to reduce

false positives.

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II. CLAIM CONSTRUCTION STANDARDS

A. Basics

Claim construction is a question of law for the Court, *see Markman*, 517 U.S. at 391, although it may involve subsidiary factual questions. *See Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 836-39 (2015). In construing the claims of a patent, the words comprising the claims "are generally given their ordinary and customary meaning" as understood by "a person of ordinary skill in the art in question at the time of the invention." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc) (citations and internal quotation marks omitted). Accordingly, courts must determine the meaning of claim terms in light of the resources that a person with such skill would review to understand the patented technology. *See id.* at 1313 (citing *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477 (Fed. Cir. 1998)). First, "the person of ordinary skill in the art is deemed to read the claim term . . . in the context of the entire patent, including the specification." *Id.* If the specification "reveal[s] a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess . . . , the inventor's lexicography governs." *Id.* at 1316. Likewise, if "the specification . . . reveal[s] an intentional disclaimer, or disavowal, of claim scope by the inventor . . .[,] the inventor's intention, as expressed in the specification, is regarded as dispositive." *Id.* (citation omitted). While the claims themselves provide significant guidance as to the meaning of a claim term, the specification is generally dispositive as "it is the single best guide to the meaning of a disputed term." *Id.* at 1314-15 (internal quotation marks omitted).

In addition to the specification, courts must examine the patent's prosecution history – that is, the "complete record of the proceedings before the PTO and includ[ing] the prior art cited during the examination of the patent." *Id.* at 1317 (citation omitted). "Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent." *Id.* (citation omitted). In particular, courts must look to the prosecution history to determine "whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id.* (citations omitted). "[W]here the patentee has unequivocally disavowed a certain meaning to obtain his patent, the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the claim congruent with the scope of the surrender." *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003).

Finally, in addition to evidence intrinsic to the patent at issue and its prosecution history, courts may look to "extrinsic evidence, which 'consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.'" *Phillips*, 415 F.3d at 1317 (quoting *Markman*, 52 F.3d at 980). In general, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id.* at 1318.

When the intrinsic evidence, that is the patent specification and prosecution history, unambiguously describes the scope of a patented invention, reliance on extrinsic evidence, which is everything outside the specification and prosecution history, is improper. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996). While the Court

may consult extrinsic evidence to educate itself about the invention and relevant technology, it may not rely upon extrinsic evidence to reach a claim construction that is clearly at odds with a construction mandated by the intrinsic evidence. *See Key Pharm. v. Hercon Labs. Corp.*, 161 F.3d 709, 716 (Fed. Cir. 1998).

B. "Nonce" Words and Means Plus Function

Courts have held that certain terms are simply placeholders and invoke means plus function construction. The Court will address the terms below, but will preface that with an overview of the applicable legal principles.[1]

Three recent Federal Circuit decisions guide this inquiry. In *Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015) (en banc),[2] the Federal Circuit considered the force of the presumption that use of the word "means" is necessary to invoke means-plus-function under 35 U.S.C. § 112, ¶ 6.[3] The Court held that the presumption is not strong. *Id.* at 1349. It further held that use of the term "module" invoked means- plus-function. *Id.* at 1350. Following the district court, it understood that "module" is simply a generic description for software or hardware that performs a specified function. *Id.*

> Generic terms such as "mechanism," "element," "device," and other nonce
> words that reflect nothing more than verbal constructs may be used in a claim
> in a manner that is tantamount to using the word "means" because they

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[1]This discussion is taken from *SecurityProfiling, LLC v. Trend Micro America, Inc.*, 2018 WL 4585279, at*1-2 (N.D. Tex. Sep. 25, 2018).

[2]Only Part II.C.1 of the opinion is en banc. *See id.* at 1347 n.3.

[3]After the prosecution of the Patents-in-Suit, this paragraph was recodified as 35 U.S.C. § 112(f).

typically do not connote sufficiently definite structure and therefore may invoke § 112, para. 6.

Id. (quotation omitted). The Court also found it unavailing that one skilled in the art could have programmed a computer to perform that function. "[T]he fact that one of skill in the art could program a computer to perform the recited functions cannot create structure where none otherwise is disclosed." *Id.* at 1351. "The standard is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure." *Id.* at 1349. "When a claim term lacks the word 'means,' the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function.'" *Id.* (quoting *Watts v. XL Sys., Inc.*, 232 F.3d 877, 880 (Fed. Cir. 2000)).

In *Zeroclick, LLC v. Apple, Inc.*, 891 F.3d 1003 (Fed. Cir. 2018), a panel of the Court reversed a district court holding that "program" and "user interface code" were nonce terms under *Williamson*. The Circuit identified three errors in the district court's approach. "First, the mere fact that the disputed limitations incorporate functional language does not automatically convert the words into means for performing such functions." *Id.* at 1008 (citing *Greenberg v. Ethicon EndoSurgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996)). Second, the district court wrongly removed the terms from their context. *Id.* For example, "user interface code" was not a generic black box, but a reference to a conventional program existing in prior art at the time of the inventions. *Id.* Third, the district court failed to make

pertinent fact findings that the terms it identified were used as a substitute for "means." *Id.* at 1009.

Most recently, in *Diebold Nixdorf, Inc. v. Int'l Trade Comm'n*, 899 F.3d 1291 (Fed. Cir. 2018), the Circuit reversed a ruling by the International Trade Commission. The case dealt with the phrase "checque standby unit," which is a component of an automatic teller machine ("ATM"). The checque standby unit was described as an "escrow" where the ATM could hold a deposit after a customer physically placed items to be deposited into the ATM but before the customer had confirmed the transaction, to allow for the return of the deposit items if the customer cancelled the transaction. The Court held that "Diebold has shown that the term 'cheque standby unit,' as understood by one of ordinary skill in the art, both fails to recite sufficiently definite structure and recites a function without reciting sufficient structure for performing that function." *Id.* at 1298. In reaching that holding, it noted that Diebold was not required to offer extrinsic evidence, but could meet its burden by relying only on intrinsic evidence. *Id.* at 1299-1300. The Court also held that the patent owner's expert's testimony did not show that "checque standby unit" had a reasonably well understood meaning in the art, and simply described the phrase in terms of its function. *Id.* at 1300-01. The Circuit thus found that § 112, ¶ 6 applied, and then held that the specification did not disclose sufficient structure corresponding to the claimed function so the claims with those terms were indefinite. *Id.* at 1302-03.

III. Disputed Terms

1. program storage device that is coupled to the microprocessor

Escort's Proposed Construction:

memory device containing machine readable instructions that is capable of interacting with the microprocessor

Uniden's Proposed Construction:

a conventional memory device such as a PROM, EPROM, EEPROM, ROM, SRAM, or battery backed up DRAM that is connected to, but accessible only by, the microprocessor

2. memory device that is coupled to the microprocessor

Escort's Proposed Construction

memory device that is capable of interacting with the microprocessor

Uniden's Proposed Construction

a conventional memory device such as a PROM, EPROM, EEPROM, ROM, SRAM, or battery backed up DRAM that is connected to, but accessible only by, the microprocessor

Analysis:

The Court will address these two phrases in tandem.

There are several points of difference in the two proposed constructions. Escort specifies that the program storage device contains machine readable instructions and interprets "coupled to" as "capable of interacting with." Uniden specifies that the device be conventional, enumerates examples of such a conventional memory device, and interprets "coupled to" as "connected to, but accessible only by."

Neither side offers any expert testimony to inform the Court how a POSITA would interpret the claim language.

Both sides agree that a program storage device is a species of memory device. Escort takes the position that memory device requires no construction. Uniden proposes to define memory device by language in the specification describing one embodiment of the invention. The Court has two issues with Uniden's approach. First, Uniden qualifies memory device as a conventional device. The Court is unclear what constitutes a "conventional" memory device. Second, the Court is unclear about the effect of the enumeration of device types. It is preceded by "such as," so the listed devices are not an exclusive or complete list. The net effect appears to limit memory device to the enumerated types or devices similar to the enumerated types. The Court finds that approach improperly imports a limitation from the specification into the claim language.

The Court therefore construes "memory device" as a device that stores information, including but not limited to devices such as a PROM, EPROM, EEPROM, ROM, SRAM, or battery backed up DRAM. The Court construes "program storage device" as a memory device that stores instructions for a processor.

The Court now turns to "coupled." Both sides rely on *In re Power Integrations, Inc.*, 884 F.3d 1370 (Fed. Cir. 2018). The Court finds *Power Integrations* instructive and helpful, but not dispositive. *Power Integrations* is the latest in a long line of cases dealing with a patent for a technique for reducing electromagnetic interference of a power supply. The technique used a counter to generate a varying voltage which varied the frequency of an

oscillator, which resulted in reducing electromagnetic interference.   The counter was "coupled" to a voltage source, which then varied the frequency of the oscillator. *Id.* at 1372. On reexamination, the Patent Trademark Appeals Board ("PTAB") used a generalist dictionary definition and construed "couple" as "to join (electric circuits or devices) into a single . . . circuit." *Id.* at 1373. The Federal Circuit held that construction was overbroad and did not encompass the idea that the counter controlled the frequency. *Id.* at 1375-77. The circuit adopted the construction from an earlier district court decision that "coupled" meant two circuits were connected such that voltage, current, or control signals pass from one to another. *Id.* at 1372. Further, "coupled" included both direct and indirect connections. *Id.*

The difficulty with simply copying the construction in *Power Integrations* is that the relationship between the microprocessor and program storage device or memory device is not one of control in the sense used in *Power Integrations*. Rather, it is information that passes between the two devices. With that alteration, the *Power Integrations* concept should serve here.

The Court must address briefly Uniden's exclusivity ("only") concept. Uniden relies on Figure 1 of the '038 Patent for that concept. That figure is a block diagram of one embodiment of the invention. In that diagram, the microprocessor block is connected to the program storage block by a double headed arrow, i.e., a line with arrowheads at both ends. The program storage block has no other connections to any other block in the figure. From this, Uniden concludes that the program storage or memory device is accessible only to the microprocessor.

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There are at least three problems with this approach. First, as Escort correctly points

out, it is inconsistent with the way "coupled" is used elsewhere in the patent. *See Rexnord*

Corp. v. The Laitram Corp., 274 F.3d 1336, 1342 (Fed. Cir. 2001) (claim terms should be

construed consistently where possible). Second, the figure is not an electrical schematic, but

a high level block diagram; to infer from that block diagram that the storage device is

accessible only by the microprocessor is too great a leap. Third, this again is improperly

importing a limitation from the specification into the claim. Accordingly, the Court does not

construe "coupled" to require an exclusive connection to the microprocessor.

The Court, therefore, construes "coupled" to mean connected directly or indirectly so

that information may be transferred between the devices.

3. determining the position of a radar detector

Escort's Proposed Construction:

No construction necessary

Uniden's Proposed Construction:

Indefinite or, in the alternative, the following construction should apply:

establishing conclusively the position of a radar detector

4. determining the velocity of the device

Escort's Proposed Construction:

No construction necessary

Uniden's Proposed Construction:

Indefinite or, in the alternative, the following construction should apply:

establishing conclusively the speed of a radar detector

The step of "determining the velocity of the device [utilized to detect the incoming radar signal]" occurs after the incoming radar signal is detected and before "generating an alert…"

5. determining the distance between the position of the radar detector and another position

Escort's Proposed Construction:

No construction necessary

Uniden's Proposed Construction:

Indefinite or, in the alternative, the following construction should apply:

establishing conclusively the distance between the position of the radar detector and another position

6. determining the bearing between the position of the radar detector and another position

Escort's Proposed Construction:

No construction necessary

Uniden's Proposed Construction:

Indefinite or, in the alternative, the following construction should apply:

establishing conclusively the heading between the position of the radar detector and another position

Analysis:

In this series of phrases, Uniden contends the word "determine" is indefinite because it is used in conflicting ways in the specification. In some places the GPS receiver determines position or velocity and provides that information to the microprocessor, and in other places the program storage device contains instructions for the microprocessor to determine velocity or position. Quite frankly, the Court sees no inconsistency. The microprocessor determines position by querying the GPS for that data, which then provides the data to the microprocessor. The Court does not find "determine" to be indefinite.

Uniden alternatively proposes that the court construe "determine" to mean "establishing conclusively." The Court is not quite sure what is intended by this. It appears to have a connotation of exactitude that is not a good fit for GPS data, which has a margin of error. *See* '679 Patent 5:40-41 (GPS "accurate to a matter of meters"). On balance, the Court agrees with Escort that "determine" is a word of ordinary usage, not used in any technical sense, that requires no construction.

7. the global positioning system receiver is operable to provide the microprocessor with data that indicates the velocity of the radar detector

Escort's Proposed Construction:

A "global positioning system receiver" is a sufficiently definite structure, rendering § 112(6) inapplicable. No construction necessary.

Uniden's Proposed Construction:

Means-plus-function element to be construed in accordance with pre-AIA 35 U.S.C. § 112, ¶6.

Function: "the global positioning system receiver is operable to provide the microprocessor with the speed of the radar detector."

Structure: The specification fails to set forth any algorithm or corresponding structure for the claimed function. Claim is indefinite.

8. the global positioning system receiver is operable to provide the microprocessor with data that indicates the heading of the radar detector

Escort's Proposed Construction:

A "global positioning system receiver" is a sufficiently definite structure, rendering § 112(6) inapplicable. No construction necessary.

Uniden's Proposed Construction:

Means-plus-function element to be construed in accordance with pre-AIA 35 U.S.C. § 112, ¶6.

Function: "the global positioning system receiver is operable to provide the microprocessor with the heading of the radar detector."

Structure: The specification fails to set forth any algorithm or corresponding structure for the claimed function. Claim is indefinite.

Analysis:

None of these phrases uses the word "means." Accordingly, there is a presumption that they are not means-plus-function claims. *Williamson*, *supra*. Uniden makes no explicit effort to rebut that presumption. Instead, Uniden appears to assume that means-plus-function applies because the specification refers to algorithms. But that is precisely the approach that

the Federal Circuit rejected in *Zeroclick*, *supra*. Nor does *Alfred E. Mann Found. v. Cochlear Corp.*, 841 F.3d 1334 (Fed. Cir. 2016), save Uniden. The claim at issue there was explicitly means-plus-function, *id.* at 1342, and the case does not address the showing needed to rebut the presumption when the word "means" is missing.

Because Uniden fails to meet its burden to rebut the presumption, the Court holds that the phrases above are not means-plus-function claims. Uniden does not propose any alternative construction. The Court, therefore, holds that no construction of the phrases is required.

9. the microprocessor is operable to disable the alert based at least in part upon the signal strength of the incoming radar signal

Escort's Proposed Construction:

A "microprocessor" is a sufficiently definite structure, rendering § 112(6) inapplicable.

the microprocessor is capable of not generating an alert based at least in part upon on the incoming radar signal's strength

Uniden's Proposed Construction:

Means-plus-function element to be construed in accordance with pre-AIA 35 U.S.C. § 112, ¶6.

Function: "the microprocessor is operable to disable the alert based at least in part upon the signal strength of the incoming radar signal."

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Structure: The specification fails to set forth any algorithm or corresponding structure for the claimed function. Claim is indefinite.

10. the microprocessor is operable to enable the alert based at least in part upon the signal strength of the incoming radar signal

Escort's Proposed Construction:

A "microprocessor" is a sufficiently definite structure, rendering § 112(6) inapplicable.

the microprocessor is capable of generating an alert based at least in part upon the incoming radar signal's strength

Uniden's Proposed Construction:

Means-plus-function element to be construed in accordance with pre-AIA 35 U.S.C. § 112, ¶6.

Function: "the microprocessor is operable to enable the alert based at least in part upon the signal strength of the incoming radar signal."

Structure: The specification fails to set forth any algorithm or corresponding structure for the claimed function. Claim is indefinite.

Analysis:

For the reasons stated in the preceding section, the Court holds that the phrases are not indefinite. Escort proposes constructions that replace "operable to" with "capable of." The Court acknowledges that "operable" is an awkward bit of patent jargon. It is, however, also a word of ordinary usage, not used in any technical sense. The Court, therefore, holds that

no construction is required. The Court is open to reconsidering this ruling if at any time it appears the jury is having difficulty with the word.

      11. "[determining]/[determines] a first position of the radar detector

Escort's Proposed Construction:

No construction necessary

Uniden's Proposed Construction:

Indefinite or, in the alternative, the following construction should apply:

establishing conclusively the position of a radar detector

Analysis:

      See Terms 3-6 above. No construction necessary.

      12. [determining]/[determines] a second position of the radar detector

Escort's Proposed Construction:

No construction necessary

Uniden's Proposed Construction:

Indefinite or, in the alternative, the following construction should apply:

establishing conclusively the position of a radar detector

Analysis:

      See Terms 3-6 above. No construction necessary.

      13. performing an act that is unrelated to muting an alert

Escort's Proposed Construction:

No construction necessary

Uniden's Proposed Construction:

Indefinite

Analysis:

Uniden argues that "unrelated" is a term of degree such as "relatively shallow," "of the order of," "the order of about 5mm," and "substantial portion." *Ex parte Oetiker*, 1991 WL 354859, 23 U.S.P.Q.2d 1641, 1644 (Bd. Pat. App. & Inter. 1991). The Court disagrees. The specification shows that radar detectors have a finite range of functions, one of which is to mute an alert, i.e., to silence an audible indication of the presence of police radar. *See* '653 Patent c.3, l. 36, c. 4, ll. 5-7. "Performing an act that is unrelated to muting an alert" would, of necessity, be anything else. The Court holds that, at least in this context, "unrelated" is not a term of degree. Accordingly, the phrase is not indefinite. The Court holds that no further construction of the phrase is required.[4]

14. warning suppression mode

Escort's Proposed Construction:

No construction necessary

Uniden's Proposed Construction:

mode in which audible and visual warnings are disabled

15. suppress / suppression

Escort's Proposed Construction:

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[4]The parties in their Joint Claim Construction and Prehearing Statement [36] indicated that "the button/a button" was in dispute. *See* Ex. A at 8. By the time of opening briefs, that issue appears to have been resolved.

No construction necessary

Uniden's Proposed Construction:

disable / disabling

Analysis:

The main point of dispute regarding "suppress" is whether it means completely disabling a warning, or whether it encompasses a less strident warning, e.g., a quieter audible warning or more subdued visual warning. Escort relies on the definition of warning suppression mode:

> a "warning suppression" mode in which warnings, particularly audible warnings, produced by the radar detector are suppressed so that they are not disturbing to the operator of the vehicle. The "warning suppression" mode may be either GPS based or non-GPS based.

'679 Patent, c. 18, ll. 15-19. Escort argues that a quieter alarm would be consistent with the goal of not disturbing the operator of the vehicle. That may be correct, but a disabled warning is also consistent with not disturbing the operator.

Other parts of the specification indicate that suppressed is used in the sense of disable. "In step 284 it is determined whether the receiver is in 'warning suppression' mode. If not in this mode, then an audible and visual response is generated . . . ." *Id.* c. 25, ll.9-11. This indicates an audible and visual response is generated if not in "warning suppression" mode and that an audible and visual response is not generated if in "warning suppression" mode. This usage of "suppress" is consistent with "disable."

Likewise, the specification provides: "If the 'always warn' flag is set for the current cell, then in step 288 an audible and visual response is generated for all frequencies identified

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by the received [sic], unless suppressed by 'warning suppression mode.'" *Id.* c. 25, ll. 27-30.

This shows that an audible and visual response is not generated if in "warning suppression"

mode. This usage of "suppress" is also consistent with "disable."

Finally, the specification discusses an "everyday route" mode for frequently traveled

routes. The radar detector is "trained" to remember permissible speeds on an "everyday

route."

> Subsequently, when the detector determines that it is on a previously defined
> everyday route, it will enter "warning suppression" mode whenever the vehicle
> speed is within a tolerance of, or below, the velocity recorded when in
> "everyday route velocity" training mode. <u>Thus, no warning signals will be
> generated</u> so long as the vehicle is not traveling faster than the threshold speed
> identified by the operator during "everyday route velocity" training of the
> detector.

Id. c. 26, ll. 41-49 (emphasis added). This shows that when in "warning suppression" mode,

"no warning signals will be generated." Again, this is consistent with "disable." Based on

the consistent usage in the specification, the Court adopts Uniden's proposed construction.

16. speed determining circuit

Escort's Proposed Construction:

a circuit for determining speed of a device

Uniden's Proposed Construction:

a circuit distinct from the position determining circuit for determining a speed of a device

Analysis:

Uniden's proposed construction requires that the speed determining circuit be distinct

and separate from the position determining circuit. This is inconsistent with the

specification, which provides that the "fusion processor 22 communicates with GPS receiver 32 to request a current location and a current vehicle speed from the GPS receiver 32." *Id.* c. 16, ll. 5-7. Thus, while the specification may permit the two circuits to be distinct, it does not require that. Escort's construction simply rearranges the order of the words, but does not add any content. The Court finds that this term does not require construction.

18. <u>[vehicle speed information is presented on said display] in conjunction with the provision of an alert by the alert section</u>

<u>Escort's Proposed Construction</u>:

Uniden proposed construction of this term during the parties' LPR 4-1(b) teleconference on September 10, 2018. Escort objects to the addition of this term as untimely and impermissible under LPR 4-1(a).

Should the Court allow this term to be construed in spite of Uniden's noncompliance with the rule, Escort submits that no construction is necessary.

<u>Uniden's Proposed Construction</u>:

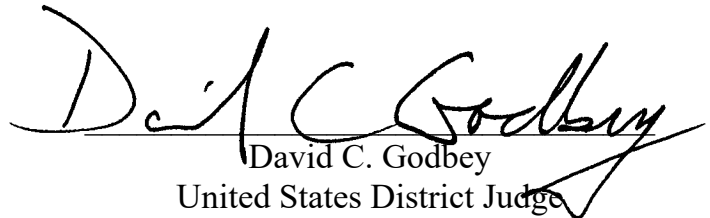as a visible warning of the alert by the alert section

<u>Analysis</u>:

Uniden does not respond to Escort's timeliness objection. The Court therefore sustains the objection and declines to construe this phrase.

CONCLUSION

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The Court orders that the various patent terms are construed as indicated. The Court has attempted to address all of the terms the parties believe require construction, but acknowledges that it may have missed something. If there are terms requiring construction that are not adequately addressed by this Order, the parties may request clarification. The Court will by separate order establish a schedule for resolution of the remaining issues in the case.

Signed May 23, 2019.

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David C. Godbey
United States District Judge